

SEQUENCE LISTING

(1) GENERAL INFORMATION

- (i) APPLICANT: Bandman, Olga
Au-Young, Janice
Goli, Surya K.
Hillman, Jennifer L.
- (ii) TITLE OF THE INVENTION: TWO NOVEL HUMAN NSP-LIKE PROTEINS
- (iii) NUMBER OF SEQUENCES: 9
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Incyte Pharmaceuticals, Inc.
 - (B) STREET: 3174 Porter Drive
 - (C) CITY: Palo Alto
 - (D) STATE: CA
 - (E) COUNTRY: U.S.
 - (F) ZIP: 94304
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Diskette
 - (B) COMPUTER: IBM Compatible
 - (C) OPERATING SYSTEM: DOS
 - (D) SOFTWARE: FastSEQ Version 1.5
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: To Be Assigned
 - (B) FILING DATE: Filed Herewith
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Billings, Lucy J.
 - (B) REGISTRATION NUMBER: 36,749
 - (C) REFERENCE/DOCKET NUMBER: PF-0114 US
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: 415-855-0555
 - (B) TELEFAX: 415-845-4166

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 199 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (vii) IMMEDIATE SOURCE:
 - (A) LIBRARY:
 - (B) CLONE: Consensus

PF-0114 US

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Met	Asp	Gly	Gln	Lys	Lys	Asn	Trp	Lys	Asp	Lys	Val	Val	Asp	Leu	Leu	
1				5					10					15		
Tyr	Trp	Arg	Asp	Ile	Lys	Lys	Thr	Gly	Val	Val	Phe	Gly	Ala	Ser	Leu	
			20					25					30			
Phe	Leu	Leu	Leu	Ser	Leu	Thr	Val	Phe	Ser	Ile	Val	Ser	Val	Thr	Ala	
		35				40					45					
Tyr	Ile	Ala	Leu	Ala	Leu	Leu	Ser	Val	Thr	Ile	Ser	Phe	Arg	Ile	Tyr	
	50					55				60						
Lys	Gly	Val	Ile	Gln	Ala	Ile	Gln	Lys	Ser	Asp	Glu	Gly	His	Pro	Phe	
65				70					75					80		
Arg	Ala	Tyr	Leu	Glu	Ser	Glu	Val	Ala	Ile	Ser	Glu	Glu	Leu	Val	Gln	
			85					90					95			
Lys	Tyr	Ser	Asn	Ser	Ala	Leu	Gly	His	Val	Asn	Cys	Thr	Ile	Lys	Glu	
		100					105						110			
Leu	Arg	Arg	Leu	Phe	Leu	Val	Asp	Asp	Leu	Val	Asp	Ser	Leu	Lys	Phe	
		115				120						125				
Ala	Val	Leu	Met	Trp	Val	Phe	Thr	Tyr	Val	Gly	Ala	Leu	Phe	Asn	Gly	
	130					135					140					
Leu	Thr	Leu	Leu	Ile	Leu	Ala	Leu	Ile	Ser	Leu	Phe	Ser	Val	Pro	Val	
145				150					155					160		
Ile	Tyr	Glu	Arg	His	Gln	Ala	Gln	Ile	Asp	His	Tyr	Leu	Gly	Leu	Ala	
			165					170					175			
Asn	Lys	Asn	Val	Lys	Asp	Ala	Met	Ala	Lys	Ile	Gln	Ala	Lys	Ile	Pro	
		180					185						190			
Gly	Leu	Lys	Arg	Lys	Ala	Glu										
	195															

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 799 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY:
- (B) CLONE: Consensus

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GGTTTGTGCA	GTTACAGCTT	TTCTNTTGGT	ATGCATAATT	AATANTTGGA	GCTGCAAAGA	60
GATCGTGACA	AGAGATGGAC	GGTCAGAAGA	AAAATTGGAA	GGACAAGGTT	GTTGACCTCC	120
TGTACTGGAG	AGACATTAAG	AAGACTGGAG	TGGTGTGTTG	TGCCAGCCTA	TTCCTGCTGC	180
TTTCATTGAC	AGTATTCAGC	ATTGTGAGCG	TAACAGCCTA	CATTGCCTTG	GCCCTGCTCT	240
CTGTGACCAT	CAGCTTTAGG	ATATACAAGG	GTGTGATCCA	AGCTATCCAG	AAATCAGATG	300
AAGGCCACCC	ATTCAGGGCA	TATCTGGAAT	CTGAAGTTGC	TATATCTGAG	GAGTTGGTTC	360
AGAAGTACAG	TAATTCTGCT	CTTGGTCATG	TGAAGTGCAC	GATAAAGGAA	CTCAGGCGCC	420
TCTTCTTAGT	TGATGATTTA	GTTGATTCTC	TGAAGTTTGC	AGTGTTGATG	TGGGTATTTA	480
CCTATGTTGG	TGCCTTGTTT	AATGGTCTGA	CACTACTGAT	TTTGGCTCTC	ATTTCACTCT	540
TCAGTGTTCC	TGTTATTTAT	GAACGGCATC	AGGCACAGAT	AGATCATTAT	CTAGGACTTG	600
CAAATAAGAA	TGTTAAAGAT	GCTATGGCTA	AAATCCAAGC	AAAAATCCCT	GGATTGAAGC	660
GCAAAGCTGA	ATGAAAACGC	CCAAAATAAT	TAGTAGGAGT	TCATCTTTAA	AGGGGATATT	720

PF-0114 US

CATTTGATTA TACGGGGGAG GGTGAGGGAA GAACGACCTT GACGTTGCAG TGCAGTTTCA
CAGATCGTTG TTAGATCTT

780
799

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: THP1NOB01
- (B) CLONE: 31870

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Met	Ala	Glu	Arg	Xaa	Ala	Ala	Thr	Gln	Ser	His	Ser	Ile	Ser	Ser	Ser	
1				5				10					15			
Ser	Phe	Gly	Ala	Glu	Pro	Ser	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Pro	Gly	
			20					25					30			
Ala	Cys	Pro	Ala	Leu	Gly	Thr	Lys	Ser	Cys	Ser	Ser	Ser	Cys	Ala	Val	
		35					40					45				
His	Asp	Leu	Ile	Xaa	Trp	Arg	Asp	Val	Lys	Lys	Thr	Gly	Phe	Val	Phe	
	50					55					60					
Gly	Thr	Thr	Leu	Ile	Met	Leu	Leu	Ser	Leu	Ala	Ala	Phe	Ser	Val	Ile	
	65				70					75					80	
Ser	Val	Val	Ser	Tyr	Leu	Ile	Leu	Ala	Leu	Leu	Ser	Val	Thr	Ile	Ser	
			85					90					95			
Phe	Arg	Ile	Tyr	Lys	Ser	Val	Ile	Gln	Ala	Val	Gln	Lys	Ser	Glu	Glu	
			100					105					110			
Gly	His	Pro	Phe	Lys	Ala	Tyr	Leu	Asp	Val	Asp	Ile	Thr	Leu	Ser	Ser	
		115					120					125				
Glu	Ala	Phe	His	Asn	Tyr	Met	Asn	Ala	Ala	Met	Val	His	Ile	Asn	Arg	
	130					135					140					
Ala	Leu	Lys	Leu	Ile	Ile	Arg	Leu	Phe	Leu	Val	Glu	Asp	Leu	Val	Asp	
	145				150					155					160	
Ser	Leu	Lys	Leu	Ala	Val	Phe	Met	Trp	Leu	Met	Thr	Tyr	Val	Gly	Ala	
			165					170						175		
Val	Phe	Asn	Gly	Ile	Thr	Leu	Leu	Ile	Leu	Ala	Glu	Leu	Leu	Ile	Xaa	
			180					185					190			
Ser	Val	Pro	Ile	Val	Tyr	Xaa	Lys	Tyr	Lys	Val	Pro	Ser	Lys	Thr	Pro	
		195					200					205				
Trp	Asn	Arg	Gln	Lys	Lys	Gly	Arg	Ile	Ser	Thr	Trp	Lys	Pro	Glu	Met	
	210					215					220					
Gln	Gln	Leu	Leu	Lys	His	His	Leu	Ile	Val	Ile	Thr	Ser	Leu	Leu	Val	
	225				230					235					240	
Leu																

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1095 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single

PF-0114 US

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:

(A) LIBRARY: THP1NOB01

(B) CLONE: 31870

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

ACACNAGCGN	NTCGNGCTCC	CGAACCTCTA	GCTGCGACTC	GGANTGAGTC	AGTCAGTCTG	60
TCGGAGTCTG	TCCTCGGAGC	AGGCGGAGTA	AAGGGACTTG	AGCGAGCCAG	TTGCCGGATT	120
ATTCTATTTT	CCCTCCCTCT	CTCCCGCCCC	GTATCTCTTT	TCATTTTNNT	NCCACCCTTG	180
CTCGCGTANC	ATGGCGGAGC	GTNCGGCGGC	CACTCAGTCC	CATTCCATCT	CCTCGTCGTC	240
CTTCGGAGCC	GAGCCGTCCG	CGCCCGGCGG	CGGCGGGAGC	CCAGGAGCCT	GCCCCGCCCT	300
GGGGACGAAG	AGCTGCAGCT	CCTCCTGTGC	GGTGCACGAT	CTGATTTTMT	GGAGAGATGT	360
GAAGAAGACT	GGGTTTGTCT	TTGGCACCAC	GCTGATCATG	CTGCTTTCCC	TGGCAGCTTT	420
CAGTGTCAAT	AGTGTGGTTT	CTTACCTCAT	CCTGGCTCTT	CTCTCTGTCA	CCATCAGCTT	480
CAGGATCTAC	AAGTCCGTCA	TCCAAGCTGT	ACAGAAGTCA	GAAGAAGGCC	ATCCATTCAA	540
AGCCTACCTG	GACGTAGACA	TTACTCTGTC	CTCAGAAGCT	TTCCATAATT	ACATGAATGC	600
TGCCATGGTG	CACATCAACA	GGGCCCTGAA	ACTCATTATT	CGTCTCTTTC	TGGTAGAAGA	660
TCTGGTTGAC	TCCTTGAAGC	TGGCTGTCTT	CATGTGGCTG	ATGACCTATG	TTGGTGCTGT	720
TTTTAACGGA	ATCACCCCTC	TAATTCTTGC	TGAACTGCTC	ATTTTNAGTG	TCCCCGATTGT	780
NTATNAGAAG	TACAAGGTTT	CAAGCAAAAC	TCCCTGGAAT	CGCCAAAAAA	AAGGCAGAAT	840
AAGTACATGG	AAACCAGAAA	TGCAACAGTT	ACTAAAACAC	CATTTAATAG	TTATAACGTC	900
GTTACTTGTA	CTATGAAGGA	AAATACTCAG	TGTCAGCTTG	AGCCTGCATT	CCAAGCTTTT	960
TTTTTAATTT	GGTGGTTTTT	TCCCATCCTT	TCCCTTTAAC	CCTCAGTNTC	AAGCACAAAN	1020
TTTNTATGGAC	TGATAANNGA	TCTATNTTAG	ANCTCAGAAG	ANGANAGNTT	CANNTGCATA	1080
GGNTAAGGNA	NTACC					1095

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 776 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(vii) IMMEDIATE SOURCE:

(A) LIBRARY: GenBank

(B) CLONE: 307307

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Met	Ala	Ala	Pro	Gly	Asp	Pro	Gln	Asp	Glu	Leu	Leu	Pro	Leu	Ala	Gly
1				5				10						15	
Pro	Gly	Ser	Gln	Trp	Leu	Arg	His	Arg	Gly	Glu	Gly	Glu	Asn	Glu	Ala
			20					25					30		
Val	Thr	Pro	Lys	Gly	Ala	Thr	Pro	Ala	Pro	Gln	Ala	Gly	Glu	Pro	Ser
			35					40					45		
Pro	Gly	Leu	Gly	Ala	Arg	Ala	Arg	Glu	Ala	Ala	Ser	Arg	Glu	Ala	Gly
			50					55					60		
Ser	Gly	Pro	Ala	Arg	Gln	Ser	Pro	Val	Ala	Met	Glu	Thr	Ala	Ser	Thr
65				70				75					80		

PF-0114 US

Gly	Val	Ala	Gly	Val	Ser	Ser	Ala	Met	Asp	His	Thr	Phe	Ser	Thr	Thr	
			85						90					95		
Ser	Lys	Asp	Gly	Glu	Gly	Ser	Cys	Tyr	Thr	Ser	Leu	Ile	Ser	Asp	Ile	
			100					105					110			
Cys	Tyr	Pro	Pro	Gln	Glu	Asp	Ser	Thr	Tyr	Phe	Thr	Gly	Ile	Leu	Gln	
		115					120					125				
Lys	Glu	Asn	Gly	His	Val	Thr	Ile	Ser	Glu	Ser	Pro	Glu	Glu	Leu	Gly	
	130					135					140					
Thr	Pro	Gly	Pro	Ser	Leu	Pro	Asp	Val	Pro	Gly	Ile	Glu	Ser	Arg	Gly	
145					150					155					160	
Leu	Phe	Ser	Ser	Asp	Ser	Gly	Ile	Glu	Met	Thr	Pro	Ala	Glu	Ser	Thr	
				165				170						175		
Glu	Val	Asn	Lys	Ile	Leu	Ala	Asp	Pro	Leu	Asp	Gln	Met	Lys	Ala	Glu	
		180						185					190			
Ala	Tyr	Lys	Tyr	Ile	Asp	Ile	Thr	Arg	Pro	Glu	Glu	Val	Lys	His	Gln	
		195					200					205				
Glu	Gln	His	His	Pro	Glu	Leu	Glu	Asp	Lys	Asp	Leu	Asp	Phe	Lys	Asn	
	210					215					220					
Lys	Asp	Thr	Asp	Ile	Ser	Ile	Lys	Pro	Glu	Gly	Val	Arg	Glu	Pro	Asp	
225					230					235					240	
Lys	Pro	Ala	Pro	Val	Glu	Gly	Lys	Ile	Ile	Lys	Asp	His	Leu	Leu	Glu	
				245				250					255			
Glu	Ser	Thr	Phe	Ala	Pro	Tyr	Ile	Asp	Asp	Leu	Ser	Glu	Glu	Gln	Arg	
			260					265					270			
Arg	Ala	Pro	Gln	Ile	Thr	Thr	Pro	Val	Lys	Ile	Thr	Leu	Thr	Glu	Ile	
		275					280					285				
Glu	Pro	Ser	Val	Glu	Thr	Thr	Thr	Gln	Glu	Lys	Thr	Pro	Glu	Lys	Gln	
	290					295					300					
Asp	Ile	Cys	Leu	Lys	Pro	Ser	Pro	Asp	Thr	Val	Pro	Thr	Val	Thr	Val	
305					310					315					320	
Ser	Glu	Pro	Glu	Asp	Asp	Ser	Pro	Gly	Ser	Ile	Thr	Pro	Pro	Ser	Ser	
				325				330						335		
Gly	Thr	Glu	Pro	Ser	Ala	Ala	Glu	Ser	Gln	Gly	Lys	Gly	Ser	Ile	Ser	
			340					345					350			
Glu	Asp	Glu	Leu	Ile	Thr	Ala	Ile	Lys	Glu	Ala	Lys	Gly	Leu	Ser	Tyr	
	355						360					365				
Glu	Thr	Ala	Glu	Asn	Pro	Arg	Pro	Val	Gly	Gln	Leu	Ala	Asp	Arg	Pro	
	370					375					380					
Glu	Val	Lys	Ala	Arg	Ser	Gly	Pro	Pro	Thr	Ile	Pro	Ser	Pro	Leu	Asp	
385					390					395					400	
His	Glu	Ala	Ser	Ser	Ala	Glu	Ser	Gly	Asp	Ser	Glu	Ile	Glu	Leu	Val	
				405					410					415		
Ser	Glu	Asp	Pro	Met	Ala	Ala	Glu	Asp	Ala	Leu	Pro	Ser	Gly	Tyr	Val	
			420					425					430			
Ser	Phe	Gly	His	Val	Gly	Gly	Pro	Pro	Pro	Ser	Pro	Ala	Ser	Pro	Ser	
	435						440					445				
Ile	Gln	Tyr	Ser	Ile	Leu	Arg	Glu	Glu	Arg	Glu	Ala	Glu	Leu	Asp	Ser	
	450					455					460					
Glu	Leu	Ile	Ile	Glu	Ser	Cys	Asp	Ala	Ser	Ser	Ala	Ser	Glu	Glu	Ser	
465					470					475					480	
Pro	Lys	Arg	Glu	Gln	Asp	Ser	Pro	Pro	Met	Lys	Pro	Ser	Ala	Leu	Asp	
				485					490					495		
Ala	Ile	Arg	Glu	Glu	Thr	Gly	Val	Arg	Ala	Glu	Glu	Arg	Ala	Pro	Ser	
			500					505					510			
Arg	Arg	Gly	Leu	Ala	Glu	Pro	Gly	Ser	Phe	Leu	Asp	Tyr	Pro	Ser	Thr	
		515					520					525				

PF-0114 US

```

Glu Pro Gln Pro Gly Pro Glu Leu Pro Pro Gly Asp Gly Ala Leu Glu
530 535 540
Pro Glu Thr Pro Met Leu Pro Arg Lys Pro Glu Glu Asp Ser Ser Ser
545 550 555 560
Asn Gln Ser Pro Ala Ala Thr Lys Gly Pro Gly Pro Leu Gly Pro Gly
565 570 575
Ala Pro Pro Pro Leu Leu Phe Leu Asn Lys Gln Lys Ala Ile Asp Leu
580 585 590
Leu Tyr Trp Arg Asp Ile Lys Gln Thr Gly Ile Val Phe Gly Ser Phe
595 600 605
Leu Leu Leu Leu Phe Ser Leu Thr Gln Phe Ser Val Val Ser Val Val
610 615 620
Ala Tyr Leu Ala Leu Ala Leu Ser Ala Thr Ile Ser Phe Arg Ile
625 630 635 640
Tyr Lys Ser Val Leu Gln Ala Val Gln Lys Thr Asp Glu Gly His Pro
645 650 655
Phe Lys Ala Tyr Leu Glu Leu Glu Ile Thr Leu Ser Gln Glu Gln Ile
660 665 670
Gln Lys Tyr Thr Asp Cys Leu Gln Phe Tyr Val Asn Ser Thr Leu Lys
675 680 685
Glu Leu Arg Arg Leu Phe Leu Val Gln Asp Leu Val Asp Ser Leu Lys
690 695 700
Phe Ala Val Leu Met Trp Leu Leu Thr Tyr Val Gly Ala Leu Phe Asn
705 710 715 720
Gly Leu Thr Leu Leu Leu Met Ala Val Val Ser Met Phe Thr Leu Pro
725 730 735
Val Val Tyr Val Lys His Gln Ala Gln Ile Asp Gln Tyr Leu Gly Leu
740 745 750
Val Arg Thr His Ile Asn Ala Val Val Ala Lys Ile Gln Ala Lys Ile
755 760 765
Pro Gly Ala Lys Arg His Ala Glu
770 775

```

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: GenBank
- (B) CLONE: 307309

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

```

Met Ala Ala Glu Asp Ala Leu Pro Ser Gly Tyr Val Ser Phe Gly His
1 5 10 15
Val Gly Gly Pro Pro Pro Ser Pro Ala Ser Pro Ser Ile Gln Tyr Ser
20 25 30
Ile Leu Arg Glu Glu Arg Glu Ala Glu Leu Asp Ser Glu Leu Ile Ile
35 40 45
Glu Ser Cys Asp Ala Ser Ser Ala Ser Glu Glu Ser Pro Lys Arg Glu
50 55 60

```

PF-0114 US

Gln	Asp	Ser	Pro	Pro	Met	Lys	Pro	Ser	Ala	Leu	Asp	Ala	Ile	Arg	Glu
65					70					75					80
Glu	Thr	Gly	Val	Arg	Ala	Glu	Glu	Arg	Ala	Pro	Ser	Arg	Arg	Gly	Leu
				85					90					95	
Ala	Glu	Pro	Gly	Ser	Phe	Leu	Asp	Tyr	Pro	Ser	Thr	Glu	Pro	Gln	Pro
			100					105					110		
Gly	Pro	Glu	Leu	Pro	Pro	Gly	Asp	Gly	Ala	Leu	Glu	Pro	Glu	Thr	Pro
		115					120					125			
Met	Leu	Pro	Arg	Lys	Pro	Glu	Glu	Asp	Ser	Ser	Ser	Asn	Gln	Ser	Pro
	130					135					140				
Ala	Ala	Thr	Lys	Gly	Pro	Gly	Pro	Leu	Gly	Pro	Gly	Ala	Pro	Pro	Pro
145					150					155					160
Leu	Leu	Phe	Leu	Asn	Lys	Gln	Lys	Ala	Ile	Asp	Leu	Leu	Tyr	Trp	Arg
				165					170					175	
Asp	Ile	Lys	Gln	Thr	Gly	Ile	Val	Phe	Gly	Ser	Phe	Leu	Leu	Leu	Leu
			180					185					190		
Phe	Ser	Leu	Thr	Gln	Phe	Ser	Val	Val	Ser	Val	Val	Ala	Tyr	Leu	Ala
	195						200					205			
Leu	Ala	Ala	Leu	Ser	Ala	Thr	Ile	Ser	Phe	Arg	Ile	Tyr	Lys	Ser	Val
	210					215					220				
Leu	Gln	Ala	Val	Gln	Lys	Thr	Asp	Glu	Gly	His	Pro	Phe	Lys	Ala	Tyr
225					230					235					240
Leu	Glu	Leu	Glu	Ile	Thr	Leu	Ser	Gln	Glu	Gln	Ile	Gln	Lys	Tyr	Thr
				245					250					255	
Asp	Cys	Leu	Gln	Phe	Tyr	Val	Asn	Ser	Thr	Leu	Lys	Glu	Leu	Arg	Arg
		260						265					270		
Leu	Phe	Leu	Val	Gln	Asp	Leu	Val	Asp	Ser	Leu	Lys	Phe	Ala	Val	Leu
	275						280					285			
Met	Trp	Leu	Leu	Thr	Tyr	Val	Gly	Ala	Leu	Phe	Asn	Gly	Leu	Thr	Leu
	290					295					300				
Leu	Leu	Met	Ala	Val	Val	Ser	Met	Phe	Thr	Leu	Pro	Val	Val	Tyr	Val
305					310					315					320
Lys	His	Gln	Ala	Gln	Ile	Asp	Gln	Tyr	Leu	Gly	Leu	Val	Arg	Thr	His
				325					330					335	
Ile	Asn	Ala	Val	Val	Ala	Lys	Ile	Gln	Ala	Lys	Ile	Pro	Gly	Ala	Lys
			340					345					350		
Arg	His	Ala	Glu												
			355												

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: GenBank
- (B) CLONE: 307311

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Met	Gln	Ala	Thr	Ala	Asp	Ser	Thr	Lys	Met	Asp	Cys	Val	Trp	Ser	Asn
1				5					10					15	

PF-0114 US

```

Trp Lys Ser Gln Ala Ile Asp Leu Leu Tyr Trp Arg Asp Ile Lys Gln
      20      25      30
Thr Gly Ile Val Phe Gly Ser Phe Leu Leu Leu Phe Ser Leu Thr
      35      40      45
Gln Phe Ser Val Val Ser Val Val Ala Tyr Leu Ala Leu Ala Ala Leu
      50      55      60
Ser Ala Thr Ile Ser Phe Arg Ile Tyr Lys Ser Val Leu Gln Ala Val
      65      70      75      80
Gln Lys Thr Asp Glu Gly His Pro Phe Lys Ala Tyr Leu Glu Leu Glu
      85      90      95
Ile Thr Leu Ser Gln Glu Gln Ile Gln Lys Tyr Thr Asp Cys Leu Gln
      100      105      110
Phe Tyr Val Asn Ser Thr Leu Lys Glu Leu Arg Arg Leu Phe Leu Val
      115      120      125
Gln Asp Leu Val Asp Ser Leu Lys Phe Ala Val Leu Met Trp Leu Leu
      130      135      140
Thr Tyr Val Gly Ala Leu Phe Asn Gly Leu Thr Leu Leu Leu Met Ala
      145      150      155      160
Val Val Ser Met Phe Thr Leu Pro Val Val Tyr Val Lys His Gln Ala
      165      170      175
Gln Ile Asp Gln Tyr Leu Gly Leu Val Arg Thr His Ile Asn Ala Val
      180      185      190
Val Ala Lys Ile Gln Ala Lys Ile Pro Gly Ala Lys Arg His Ala Glu
      195      200      205

```

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: GenBank
- (B) CLONE: 281046

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```

Met Asp Cys Val Trp Ser Asn Trp Lys Ser Gln Ala Ile Asp Leu Leu
  1      5      10      15
Tyr Trp Arg Asp Ile Lys Gln Thr Gly Ile Val Phe Gly Ser Phe Leu
      20      25      30
Leu Leu Leu Phe Ser Leu Thr Gln Phe Ser Val Val Ser Val Val Ala
      35      40      45
Tyr Leu Ala Leu Ala Ala Leu Ser Ala Thr Ile Ser Phe Arg Ile Tyr
      50      55      60
Lys Ser Val Leu Gln Ala Val Gln Lys Thr Asp Glu Gly His Pro Phe
      65      70      75      80
Lys Ala Tyr Leu Glu Leu Glu Ile Thr Leu Ser Gln Glu Gln Ile Gln
      85      90      95
Lys Tyr Thr Asp Cys Leu Gln Leu Tyr Val Asn Ser Thr Leu Lys Glu
      100      105      110
Leu Arg Arg Leu Phe Leu Val Gln Asp Leu Val Asp Ser Leu Lys Phe
      115      120      125

```


PF-0114 US

Ala	Val	Leu	Met	Trp	Leu	Leu	Thr	Tyr	Val	Gly	Ala	Leu	Phe	Asn	Gly	
	130						135				140					
Leu	Thr	Leu	Leu	Leu	Met	Ala	Val	Val	Ser	Met	Phe	Thr	Leu	Pro	Val	
145					150					155					160	
Val	Tyr	Val	Lys	His	Gln	Ala	Gln	Val	Asp	Gln	Tyr	Leu	Gly	Leu	Val	
			165						170					175		
Arg	Thr	His	Ile	Asn	Thr	Val	Val	Ala	Lys	Ile	Gln	Ala	Lys	Ile	Pro	
		180						185					190			
Gly	Ala	Arg	Gly	Met	Leu	Ser	Arg	Trp	Leu	Pro	Gln	Glu	Lys	Pro	Asp	
	195					200					205					
Met	Asn	Gly	Gly	Val	Trp	Ser	Gly	Asn	Ser	Ser	Leu	Leu	Pro	Arg	Tyr	
	210				215					220						
Cys	Glu	Leu	Ile	Val	Ser	Leu	Pro	Gln	Tyr	His	Asn	Leu	Arg	Gly	Lys	
225					230					235					240	
Leu	Arg	Asp	Arg	Cys	Phe	Gln	Ser	Phe	Pro	Val	Leu	Leu	Gly	Tyr	Leu	
			245						250					255		
Ser	Pro	Pro	Arg	Pro	Leu	Ser	Ser	Thr	Lys	Val						
			260					265								

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: SPLNFET01
- (B) CLONE: 28742

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

CCTATNCCNG	CTGCTTTCAT	TGACAGTATT	CAGCATTGTG	AGCGTAACAG	CCTACATTGC	60
CTTNGCCCTG	CNCTCTGTGA	CCATCAGCTN	TAGGCTATAC	AAGGGTGTGA	TCCAAGCTAT	120
CCAGAAATCA	GATGAAGGNC	ACCCATTTCAG	GGCATATCTG	GANTCTGAAG	TTGCTATATC	180
TGAGGAGTTG	NTTCAGAAGT	ACACGTAAAT	NNTGNNCNTG	GTCAATGTGA	NCTCCACGNC	240
TAANGGANCT	CAGGTGCCTA	T				261